

# BookletChart<sup>TM</sup>

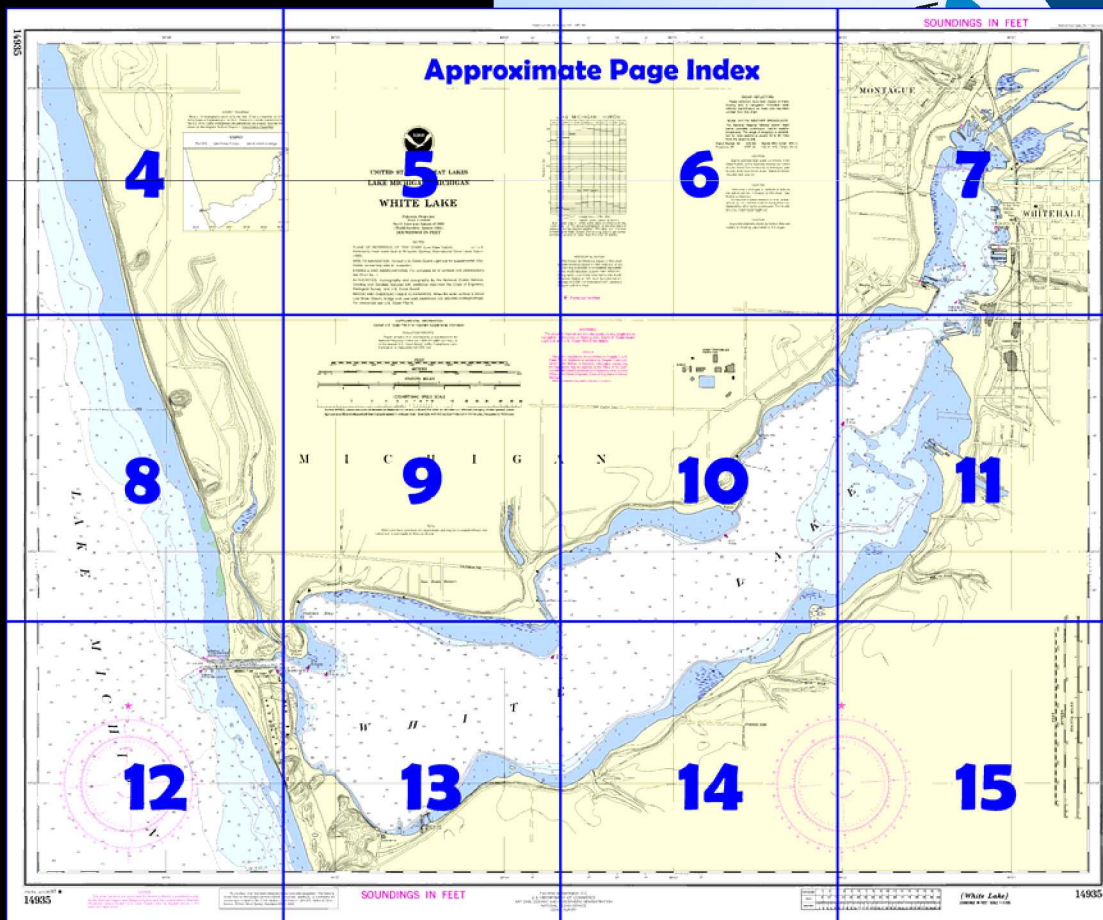
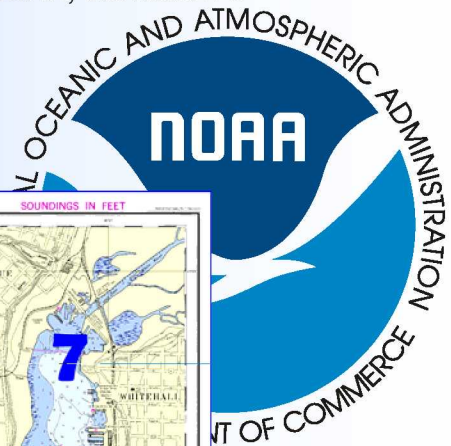
## White Lake

(NOAA Chart 14935)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



### What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

### What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

### Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



### [Coast Pilot 6, Chapter 11 excerpts]

(240) **White Lake**, about 20 miles SSE of Little Sable Point, is separated from Lake Michigan by a narrow strip of sandy bluffs. A dredged cut affords access between the lakes.

The towns of **Montague, Mich.**, and **Whitehall, Mich.**, are at the NE end of White Lake about 4 miles above the cut.

(241) The dredged entrance channel leads from deep water in Lake Michigan between parallel piers and revetments to the W end of White Lake. The outer ends of the piers and

the inner end of the S pier are marked by lights. The outer end of the channel between the piers is subject to extensive shoaling. In September 2004, the controlling depth was 9.1 feet between the piers and revetments to White Lake. Currents in the channel attain velocities up to 3 mph in either direction.

(242) Mooring to the piers and revetments is prohibited. Mariners are cautioned against navigating outside channel limits in the vicinity of structures protected by stone riprap.

(243) In White Lake, at the inner end of the dredged channel, the channel bends SE around the shoal off **Indian Point**. The S edge of the shoal is marked by lighted buoys. The lake has central depths of 25 to 70 feet with shoals extending as much as 0.6 mile from shore. Lighted buoys and lights at the outer edges of the shoals mark the deep water through the lake to its head. **White River** flows into the head of the lake between Montague and Whitehall. The bar at the mouth of the river has depths of 2 feet.

(246) A **speed limit** of 8 mph is enforced in White Lake.

(248) A marina developed by the Michigan State Waterways Commission is at Whitehall. Marinas here and at Montague provide transient berths, gasoline, diesel fuel, water, ice, electricity, sewage pump-out, marine supplies, launching ramp, and harbormaster services. The harbormaster monitors VHF-FM channels 16 and 9. Hoists to 30 tons and a 15-ton marine railway for boats to 38 feet are available for hull, engine, and electronic repairs.

# Table of Selected Chart Notes

## RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

## HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.038' northward and 0.247' westward to agree with this chart.

## CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

## CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.  
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

## NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio, or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.  
Refer to charted regulation section numbers.

## NOAA VHF-FM WEATHER BROADCASTS

The National Weather Service station listed below provides continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Grand Rapids, MI	KIG-63	162.55 MHz (Chan. WX-1)
Hesperia, MI	WWF-36	162.47 MHz (Chan. WX-3)

## POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

## SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important supplemental information.

## WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

## SOURCE DIAGRAM

Most of the hydrography identified by the letter "I" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Channels currently maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

## CAUTION

This chart has been corrected from the Notice to Mariners published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the date shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

**AUTHORITIES.** Hydrography and topography by the National Ocean Service, Charting and Geodetic Services with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

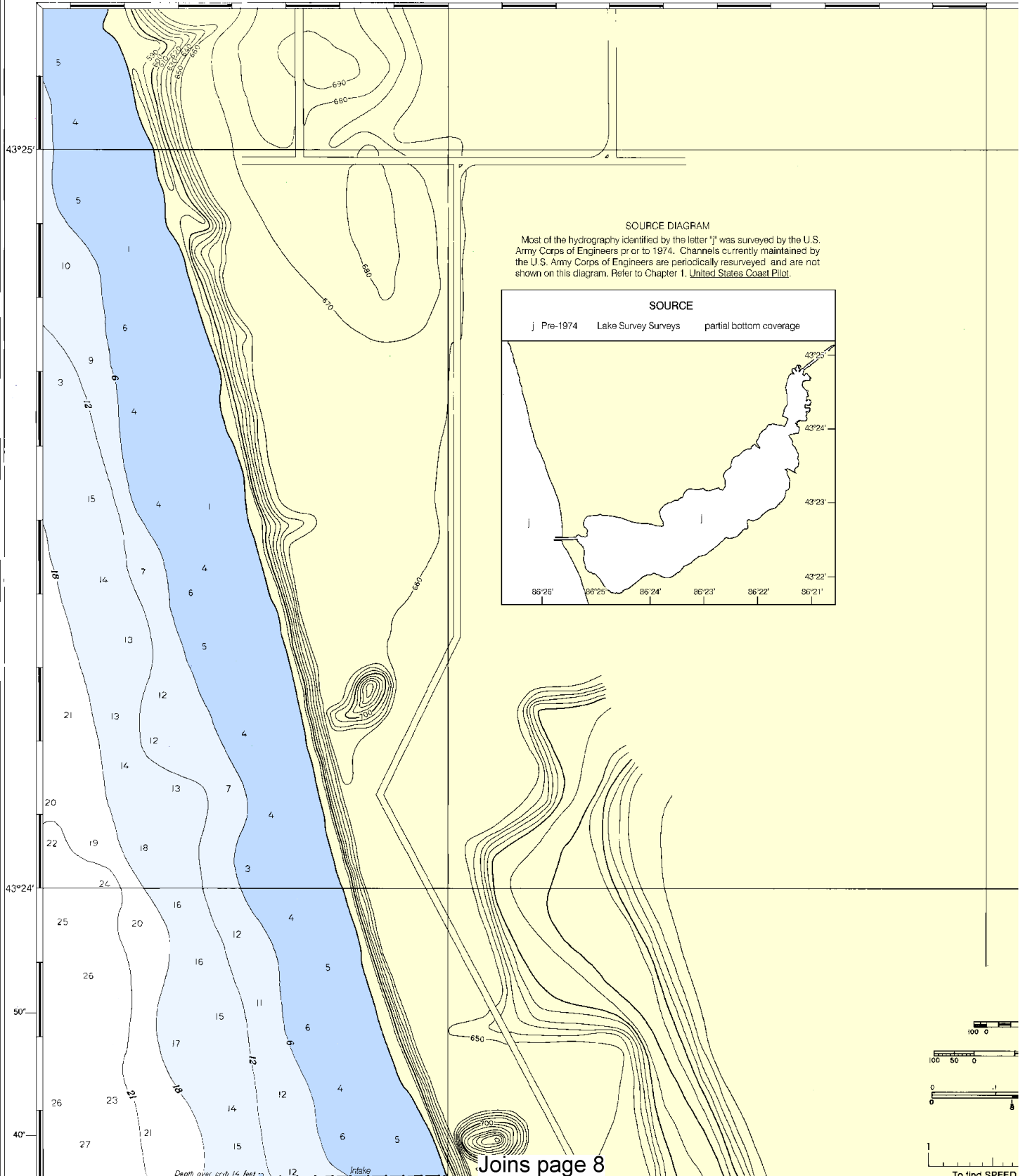
**PLANE OF REFERENCE OF THIS CHART** (Low Water Datum) . . . . . 577.5 ft. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

**BRIDGE AND OVERHEAD CABLE CLEARANCES.** When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

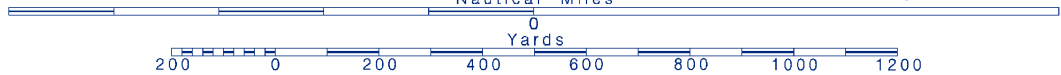
**AIDS TO NAVIGATION.** Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

**SYMBOLS AND ABBREVIATIONS.** For complete list of symbols and abbreviations see Chart No. 1.





Joins page 8



86°24' 50' 40' 30' 20' 10' 86°23'



# UNITED STATES - GREAT LAKES LAKE MICHIGAN - MICHIGAN

## WHITE LAKE

Polyconic Projection  
Scale 1:10,000  
North American Datum of 1983  
(World Geodetic System 1984)  
SOUNDINGS IN FEET

### NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) . . . . . 577.5 ft.  
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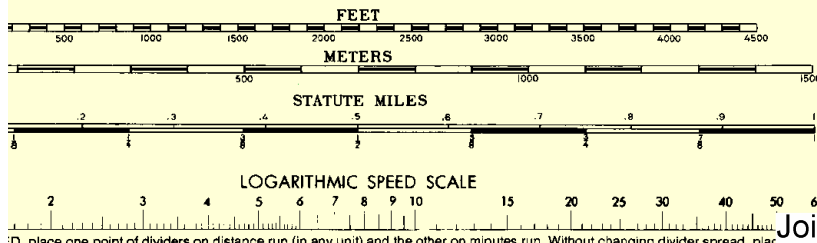
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### SUPPLEMENTAL INFORMATION

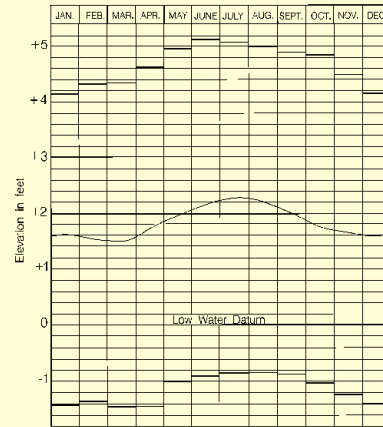
Consult U.S. Coast Pilot 6 for important supplemental information.

### POLLUTION REPORTS

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### LAKE MICHIGAN - HURON



Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.038" northward and 0.247" westward to agree with this chart.

Ⓟ Pump-out facilities

### WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

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Refer to charted regulation section numbers.

Joins page 6

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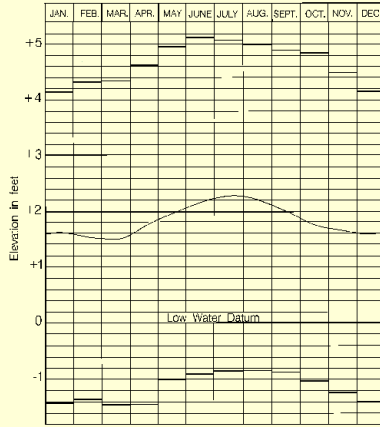
Joins page 9

This BookletChart was reduced to 75% of the original chart scale.  
The new scale is 1:13333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

5

86°24' 50' 40' 30' 20' 10' 86°23' 50'

### LAKE MICHIGAN - HURON



Average levels (1967-1996)  
 Extreme Levels (period of record)  
 Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

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Grand Rapids, MI	KIG-63	162.55 MHz
Hesperia, MI	WWF-36	162.47 MHz

#### CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted at Low Water Datum may be submerged, particularly in the near shore areas. Mariner proceed with caution.

#### CAUTION

Temporary changes or defects in navigation are not indicated on this chart. Notice to Mariners.

During some winter months or when covered by ice, certain aids to navigation are replaced by other types or removed. For see U.S. Coast Guard Light List.

#### CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the extreme ends.

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 MICHIGAN  
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Joins page 5

(m) ..... 577.5 ft.  
 National Great Lakes Datum

List for supplemental information.

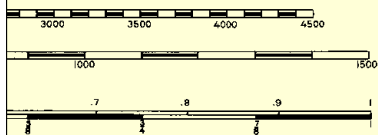
of symbols and abbreviations

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 from the Corps of Engineers,

on the water surface is above  
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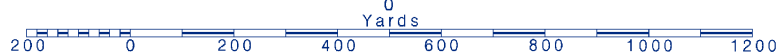
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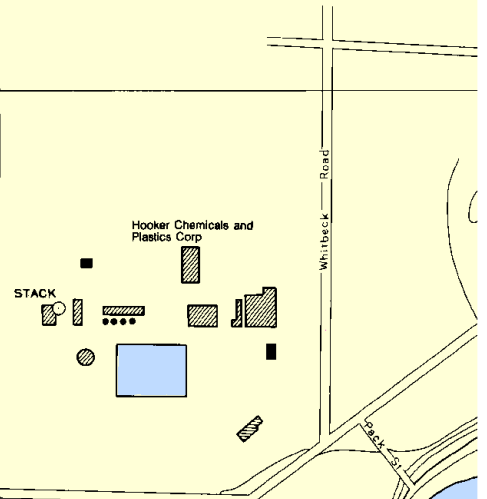
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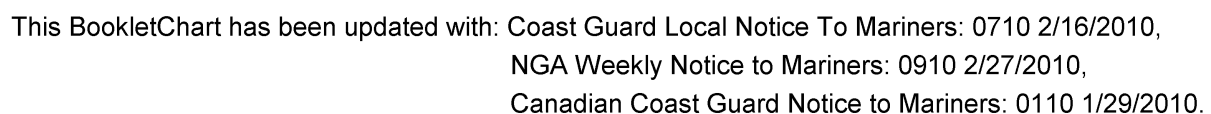
See Note on page 5.



Joins page 10



Nautical Chart Catalog No. 4, Panel B & C



Joins page 4

43°24'

50"

40"

30"

20"

10"

43°23'

50"

43

44

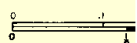
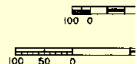
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To find SPEED, right point on 60

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Indian Point

Indian Bay

Joins page 12

FT FOR WIDTH OF 80 FT JUL 2008

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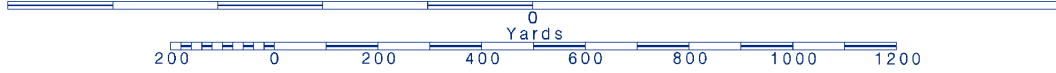
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Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.





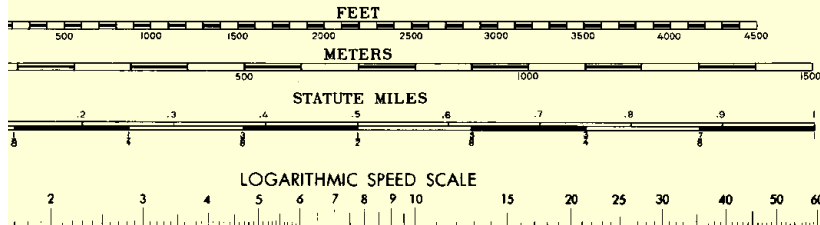
SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.

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SUPPLEMENTAL INFORMATION  
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POLLUTION REPORTS  
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Use dividers to place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots

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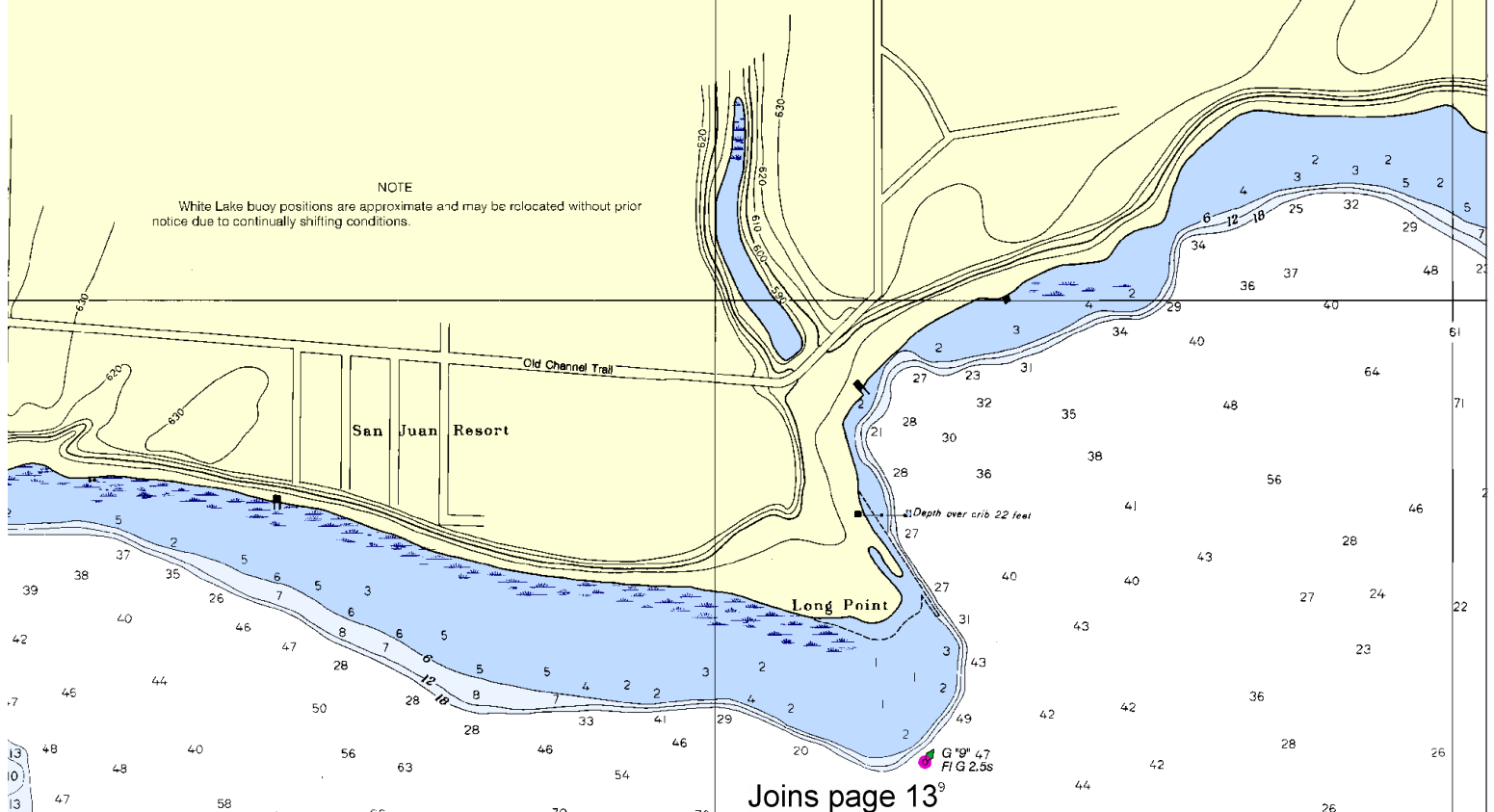
⊕ Pump-out facilities

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Refer to charted regulation section numbers.

I C H I G A N

NOTE  
White Lake buoy positions are approximate and may be relocated without prior notice due to continually shifting conditions.



Joins page 10

of symbols and abbreviations

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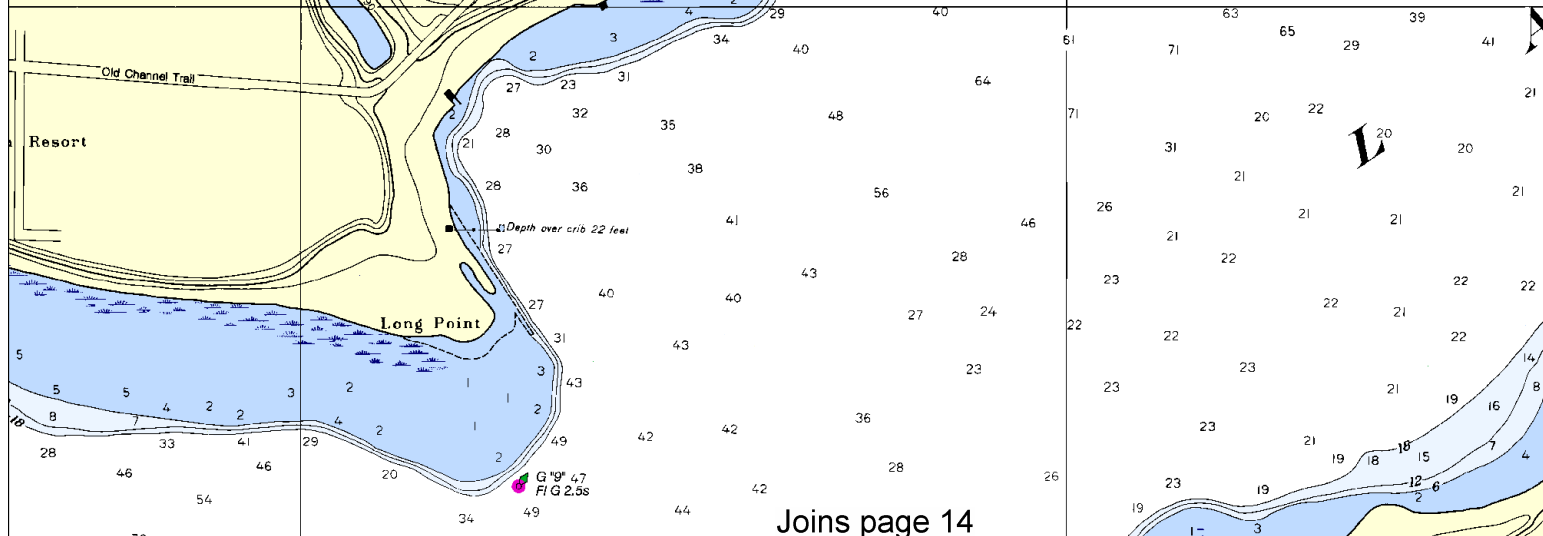


SCALE  
15 20 25 30 40 50 60

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0 nautical miles run in 15 minutes, the speed is 16.0 knots

Joins page 9

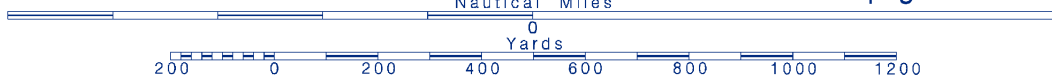
and may be relocated without prior

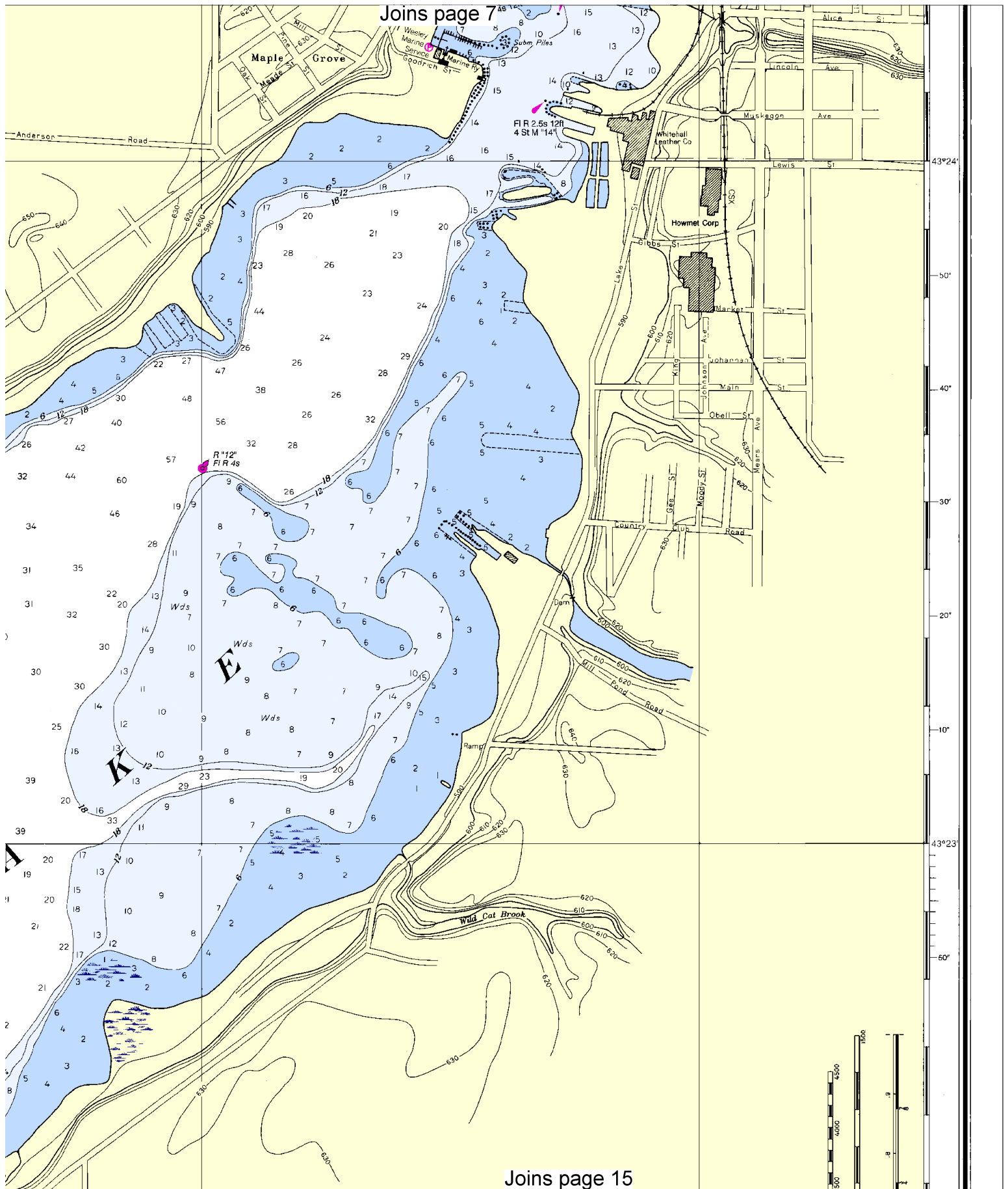


Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.





Joins page 7

Joins page 15

[illegible]

**14935**

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12

North

Printed at reduced scale.

~~SCALE 1:10,000~~  
Nautical Miles

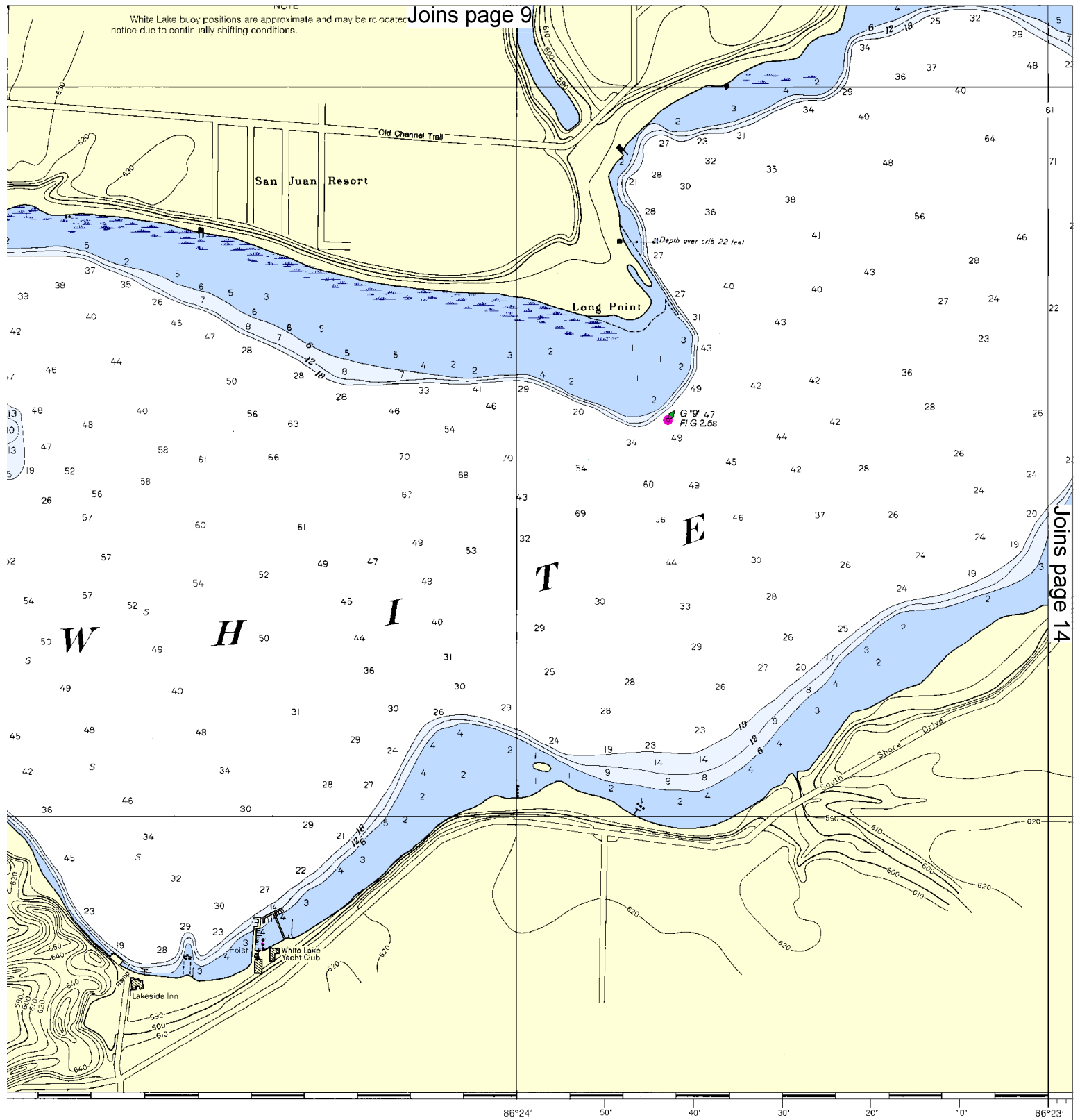
See Note on page 5.

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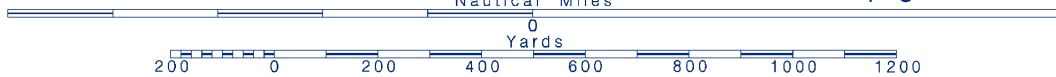
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Joins page 9

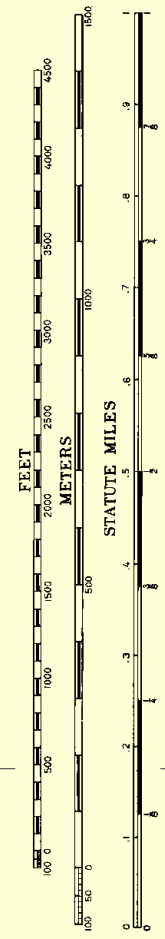
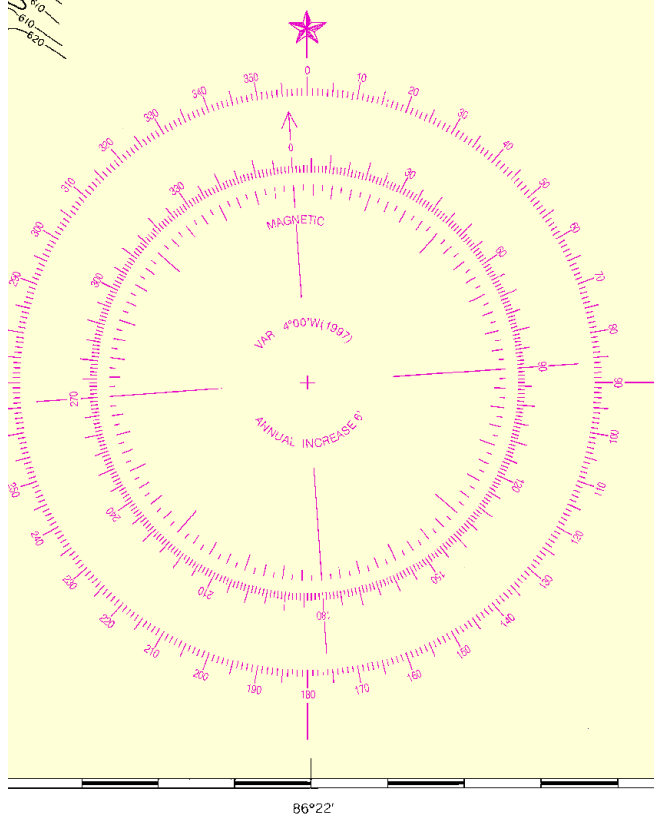
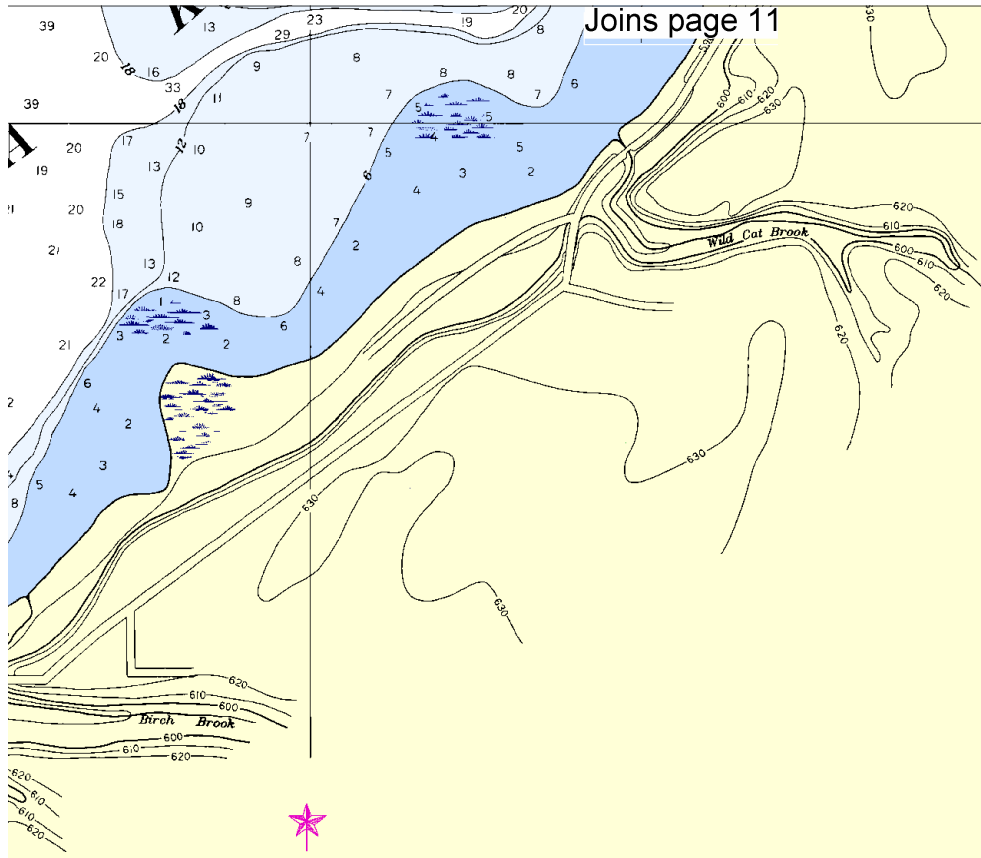


SOUNDINGS IN FEET

Published at Washington, D.C.  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SERVICE  
COAST SURVEY



Joins page 11



43°23'  
60°  
43°22'

86°22'

86°21'

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

(White Lake)  
SOUNDINGS IN FEET - SCALE 1:10,000

14935

## EMERGENCY INFORMATION

### VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

**Channel 16 – Emergency, distress and safety calls** to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

**Channels 68, 69, 71, 72 & 78A** – Recreational boat channels.

### Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

### **HAVE ALL PERSONS PUT ON LIFE JACKETS !!**

**Mobile Phones** – Call 911 for water rescue.

**Coast Guard Search & Rescue (RCC)** – 216-902-6117

**Coast Guard S & R (Sector Great Lakes)** – 616-850-2501

**NOAA Weather Radio** – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

**Getting and Giving Help** – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



## NOAA CHARTING PUBLICATIONS

**Official NOAA Nautical Charts** – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official Print-on-Demand Nautical Charts** – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at [www.OceanGrafix.com](http://www.OceanGrafix.com).

**Official Electronic Navigational Charts (NOAA ENC<sup>®</sup>)** – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official Raster Navigational Charts (NOAA RNC<sup>™</sup>)** – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official BookletCharts<sup>™</sup>** – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is [www.NauticalCharts.gov/bookletcharts](http://www.NauticalCharts.gov/bookletcharts).

**Official PocketCharts<sup>™</sup>** – PocketCharts<sup>™</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

**Official U.S. Coast Pilot<sup>®</sup>** – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official On-Line Chart Viewer** – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is [www.NauticalCharts.gov/viewer](http://www.NauticalCharts.gov/viewer).

**Official Nautical Chart Catalogs** – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

**Internet Sites:** [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov), [www.NOAA.gov](http://www.NOAA.gov), [www.TidesandCurrents.NOAA.gov](http://www.TidesandCurrents.NOAA.gov), [www.NOS.NOAA.gov](http://www.NOS.NOAA.gov).